|           |      | EAST SEARCH  | 8/20/04                                     |
|-----------|------|--|---|
| L#        | Hits | Search String  | Databases                                   |
| S1        | 2583 | (process near2 control\$3) and (adaptive near2 control\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| SS        | 811  | S1 and ((measure\$4 or collect\$3) with data)              | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S3        | 495  | S1 and (model\$3 with data)                                | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
|           | 300  | S2 and S3  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| SS        | 155  | S4 and ((predict\$3 or forecast\$3) with model\$1)         | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| Se        | 155  | S4 and (model\$1 with (accuracy or error\$1))              | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| 22        | 115  | S5 and S6  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
|           | 32   | S4 and (model\$3 with regression)                          | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB |
|           | 48   | S4 and ("mean square" with (error or deviation))           | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
|           | 0    | S4 and (sort\$3 with data with (error or deviation))       | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
|           | 178  | S4 and (data with (error or deviation))                    | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB |
| S14       | 22   | S4 and ((eliminat\$3 or discard\$3) with data)             | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
|           | 0    | S4 and (range with continuous with data)                   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
|           | 20   | S4 and (preprocess\$3 with data)                           | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
|           | 149  | S4 and (reduc\$4 with data)                                | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB |
|           | 155  | S7 or S8 or S9 or S13 or S15 or S17 or S20                 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
|           | 13   | S4 and (sort\$3 with data)                                 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
|           | 9    | S11 and S12  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S15       | 4    | S12 and S14  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S17       | 9    | S4 and (range with continuous)                             | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM TDB |
| S22       | 49   | S4 and (continuous with data)                              | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| S23       | 172  | S4 and (data with range)                                   | US-PGPUB: USPAT: EPO: JPO: DERWENT: IBM TDB |
| S24       | 36   | S22 and S23  | US-PGPUB: USPAT: FPO: JPO: DFRWFNT: IBM_TDB |
| S20       | 12   | S18 and S19  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB |
| 09/857281 |      | Stefan Schaffler et al.                                    |   |
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| Results of search se      | Results of search set L21:S7 or S8 or S9 or S13 or S15 or S17 or S20  |                         |          |
|---------------------------|---|-------------------------|----------|
| Document Kind Codes Title |   | Issue Date Current OR A | Abstract |
| US 20040130442 A1         | US 20040130442 A1 Wireless and powerless sensor and interrogator  | 20040708 340/443        |          |
| US 20040130276 A1         | US 20040130276 A1 System and method of applying adaptive control to the control of particle accelerators with vai | 20040708 315/501        |          |
| US 20040129838 A1         | US 20040129838 A1 Flow control device and method of controlling flow  | 20040708 244/199        |          |
| US 20040117040 A1         | US 20040117040 A1 System and method of adaptive control of processes with varying dynamics                        | 20040617 700/29         |          |
| US 20040111168 A1         | US 20040111168 A1 Adaptive value generating apparatus, adaptive procedure control program, and adaptive value     | 20040610 700/28         |          |
| US 20040103108 A1         | US 20040103108 A1 Method and computer-based sytem for non-probabilistic hypothesis generation and verificatio     | 20040527 707/100        |          |
| US 20040083993 A1         | US 20040083993 A1 State space control of solenoids  | 20040506 123/90.11      |          |
| US 20040083013 A1         | US 20040083013 A1 Method of operating a plant and a control system for controlling the same                       | 20040429 700/47         |          |
| US 20040059441 A1         | US 20040059441 A1 Kiin thermal and combustion control   | 20040325 700/29         |          |
| US 20040031058 A1         | US 20040031058 A1 Method and apparatus for browsing using alternative linkbases                                   | 20040212 725/112        |          |
| US 20040015335 A1         | US 20040015335 A1 Method, system and medium for controlling manufacturing process using adaptive models ba:       | 20040122 703/2          |          |

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| 20030217337                            | Method for controlling the performance of a target system  | 20031120 716/1      |
|--|--|---------------------|
|  | State based adaptive feedback feedforward PID controller   | 20031016 700/42     |
| US 20030093392 A1<br>US 20030088322 A1 | System for intelligent control based on soft computing<br>Kiln thermal and combustion control  |                     |
|  | Method and apparatus for modeling dynamic and steady-state processes for prediction contri-  | 20030306 700/33     |
|  | Method and apparatus for controlling a non-linear mill   |                     |
| 20030049390,                           | Feedback control of plasma-enhanced chemical vapor deposition processes  | 20030313 427/585    |
| 20030049376                            | Feedback control of sub-atmospheric chemical vapor deposition processes  | 20030313 427/255.28 |
| 20030044344                            | Method for controlling polysulfide production  | 20030306 423/562    |
| 20030028265 /                          | Kiln/cooler control and upset recovery using a combination of model predictive control and exp   | 20030206 700/31     |
|  | Method and apparatus for adaptive control of marginally stable systems   |                     |
|  | Feedforward and feedback control for conditioning of chemical mechanical polishing pad   |                     |
|  | Method and apparatus for creating time-optimal commands for linear systems   | 20030123 700/29     |
| •                                      | Method for optimizing a plant with multiple inputs   |                     |
| US 20030014131 A1<br>US 20030014131 A1 | System, method and computer program product for identifying chemical compounds having di<br>Method for ontimizing a plant with multiple inputs | 20030116 702/19     |
| •                                      | Control of chemical machanical policiping and conditioner disordium valuation to image and it  |                     |
| . ~                                    | Feedback control of a chemical mechanical polishing device providing manipulation of remove  | 20021220 431/21     |
| •                                      | Adaptive control of data packet size in networks   |                     |
| US 20020156542 A1                      | Methods, devices and systems for monitoring, controlling and optimizing processes  |                     |
| US 20020151992 A1                      | Media recording device with packet data interface  |                     |
| US 20020077537 A1                      | Ferromagnetic foreign body detection with background canceling   |                     |
| US 20020072828 A1                      | Computer method and apparatus for constraining a non-linear approximator of an empirical pr  | 20020613 700/269    |
| US 20020053555 A1                      | Spot welding system and method for sensing welding conditions in real time   | 20020509 219/110    |
| US 20020044014 A1                      | Amplifier measurement and modeling processes for use in generating predistortion parameter   | 20020418 330/2      |
| US 20020016665 A1                      | System for intelligent control of an engine based on soft computing  |                     |
| US 20020016640 A1                      | Multi-variable matrix process control  |                     |
| US 20020008578 A1                      | Amplifier measurement and modeling processes for use in generating predistortion parameter   |                     |
| US 20010030392 A1                      | Ampliller measurement and modeling processes for use in generating predistortion parameter   |                     |
| US 6757579 B1                          | riyonu iirearineural newon process control<br>Kalman filtar stata astimation for a manufasturina sustam  | 20010927 /03/13     |
| US 6757570 B1                          | System and method for adaptive control of uncertain poplinear processes  | 20040629 700/108    |
| US 6745088 B2                          | Multi-variable matrix process control  | 20040629 700/45     |
| US 6738682 B1                          | Method and apparatus for scheduling based on state estimation uncertainties  | 20040518 700/100    |
| US 6738677 B2                          | Method and apparatus for modeling dynamic and steady-state processes for prediction, contri  | 20040518 700/44     |
| US 6736089 B1                          | Method and system for sootblowing optimization   | 20040518 122/379    |
| US 6735483 B2                          | Method and apparatus for controlling a non-linear mill   |                     |
| US 6721718 B2                          | System for intelligent control based on soft computing   | 20040413 706/2      |
| US 6701274 B1                          | Prediction of error magnitude in a pressure transmitter  | 20040302 702/140    |
| US 6697436 B1                          | Transmission antenna array system with predistortion   |                     |
| US 6694196 B2                          | Method and apparatus for creating time-optimal commands for linear systems   | 20040217 700/28     |
| US 6665308 B1                          | Apparatus and method for equalization in distributed digital data transmission systems   | 20031216 370/441    |
| US 6647358 B2                          | Pharmacokinetic-based drug design tool and method  | 20031111 703/2      |
| US 6640145 B2                          | Media recording device with packet data interface  | 20031028 700/83     |
| US 6625501 B2                          | Kiln thermal and combustion control  | 20030923 700/44     |
|  | Advanced ship autopilot system   | 20030826 701/21     |
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| Active acoustic and structural vibration control without online controller adjustment and path Method for real-time traffic analysis on packet networks Run-to-run controller for use in microelectronic fabrication Digital predistortion methods for wideband amplifiers 3-brain architecture for an intelligent decision and control system Method, system and computer program product for non-linear mapping of multi-dimensional Pharmacokinetic-based drug design tool and method Method for chemical addition utilizing adaptive optimization Spot welding system and method for sensing welding conditions in real time | Method and apparatus for creating time-optimal commands for linear systems Ferromagnetic foreign body detection with background canceling Method and apparatus for controlling a non-linear mill Method and apparatus for modeling dynamic and steady-state processes for prediction, contro Amplifier measurement and modeling processes for use in generating predistortion parameter System for intelligent control of a vehicle suspension based on soft computing Amplifier measurement and modeling processes for use in generating predistortion parameter System, method, and computer program product for representing proximity data in a multi-dirr | Nin thermal and combustion control  Application of adaptive object-oriented optimization software to an automatic optimization oilfit System, method and computer program product for identifying chemical compounds having of System for intelligent control based on soft computing Adaptive pattern recognition based control system and method Amplifier measurement and modeling processes for use in generating predistortion parameter Method for optimizing a plant with multiple inputs Model-based predictive control of thermal processing Amplifier measurement and modeling processes for use in generating predistortion parameter Dual mode tracking system | Predistortion amplifier system with separately controllable amplifiers Hybrid linear-neural network process control Method for on-line optimization of a plant Non-linear model predictive control method for controlling a gas-phase reactor including a rap Analyzer for modeling and optimizing maintenance operations Method and apparatus for adaptive hybrid vehicle control System for intelligent control of an engine based on soft computing Model-based predictive control of thermal processing 3-brain architecture for an intelligent decision and control system Vehicle control apparatus and method Non-linear model predictive control method for controlling a gas-phase reactor including a rap Adaptive object-oriented optimization software system Analyzer for modeling and optimizing maintenance operations System and method for adaptive control of uncertain nonlinear processes Modeling position error nonlinearity to improve servo performance Digital control of a linc linear power amplifier Method for steady-state identification based upon identified dynamics System for real-time economic optimizing of manufacturing process control Control system for cross-directional profile sheet formation Apparatus and method for adaptively forming an antenna beam pattern in a wireless commun Lower overhead method for data transmission using ATM and SCDMA over hybrid fiber coax Method and apparatus for dynamic and steady state modeling over a desired path between th |
| US 6601054 B1<br>US 6597660 B1<br>US 6587744 B1<br>US 6587514 B1<br>US 6571227 B1<br>US 6571227 B1<br>US 6535795 B1<br>US 6535795 B1   | US 6505085 B1<br>US 6496713 B2<br>US 6493596 B1<br>US 6487459 B1<br>US 6463371 B1<br>US 6453374 B2<br>US 6459334 B2  | US 6434435 B1<br>US 6434435 B1<br>US 64241612 B1<br>US 6415272 B1<br>US 6388513 B1<br>US 6381504 B1<br>US 6373033 B1<br>US 6373033 B1<br>US 6373033 B1<br>US 6373033 B1  | US 6342810 B1 US 6278962 B1 US 6268355 B1 US 6263355 B1 US 6242873 B1 US 6246972 B1 US 6246972 B1 US 6149910 A US 6142910 A US 6112126 A US 6112126 A US 6112126 A US 6112126 A US 6012257 A US 601267 A US 609134 A US 609134 A US 609134 A US 609134 A US 6098334 A US 6098334 A US 6098334 A US 6098334 A US 60986334 A   |

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|--|--|---|---|---|---|
| Multi-input multi-output generic non-interacting controller  Human factored interface incorporating adaptive pattern recognition based controller apparatt In-flight adaptive performance optimization (APO) control using redundant control effectors of Human-factored interface corporating adaptive pattern recognition based controller apparatus Method of adjusting the air/fuel ratio for an internal combustion engine having a catalytic conv Hybrid linear-neural network process control Digital transmission of acoustic signals over a noisy communication channel Morphological pattern recognition based controller system | Human factorized interface incorporating adaptive pattern recognition based controller apparatu.  Human factorized interface incorporating adaptive pattern recognition based controller apparatu.  Adaptive resource allocation using neural networks.  Adaptive resource allocation using neural networks.  Method and apparatus for applying if-then-else rules to data sets in a relational data base and Digital servo control system for use in disk drives. | Feedback method for controlling non-linear processes Digital servo control system for use in disk drives Digital servo control system for use in disk drives, having state space observer including integ Digital servo control system for use in disk drives using driver saturation model Adaptive model predictive process control using neural networks Digital servo control system for use in disk drives Digital servo control system for use in disk drives Digital servo control system for use in disk drives Digital servo control system for use in disk drives | Predictive control of rolling mills using neural network gauge estimation Control system with neural network trained as general and local models Method for adaptive control of human-machine systems employing disturbance response Model predictive control apparatus and method Digital transmission of acoustic signals over a noisy communication channel Hierarchical control system for molecular beam epitaxy Self-tuning controller that extracts process model characteristics Method and system for process control with complex inference mechanism using qualitative a | Process control method and system for performing control of a controlled system by use of a Receding horizon based adaptive control having means for minimizing operating costs. Neural network process measurement and control.  Method and system for process control with complex inference mechanism using qualitative a Integrated imaging sensor/neural network controller for combustion systems. Method and system for process control with complex inference mechanism.  Multi-line serial printer.  Artificial intelligence for adaptive machining control of surface finish. | Adaptive process control system System for quality monitoring and control in an electrophotographic process Apparatus and method using adaptive gain scheduling algorithm Electrophotographic color proofing apparatus and method Time-discrete adaptive switching on-off controller System for determining abnormal plant operation based on whiteness indexes Template-matching adaptive control system for welding |
| US 5920478 A US 5920477 A US 5908176 A US 5903454 A US 5901552 A US 5877954 A US 5877055 A US 5877055 A  | US 5774357 A<br>US 5744866 A<br>US 5714866 A<br>US 5704012 A<br>US 5701400 A<br>US 5684650 A   | US 5682309 A US 5680272 A US 5677809 A US 5675450 A US 5659667 A US 5646797 A US 5638230 A US 563889 A  | US 5586221 A US 5586033 A US 555495 A US 5519605 A US 5511511 A US 5461559 A US 5394322 A US 5377308 A  | US 5311421 A US 5301101 A US 5282261 A US 5251285 A US 5249954 A US 5051932 A US 4926099 A US 4926309 A   | US 4882526 A US 4780744 A US 4768143 A US 4708459 A US 4630853 A US 4630189 A US 4491718 A  |